



AGE AND SEX TRENDS IN ASSUMED
SIMILARITY TO THE SAME SEX
PARENT AS A FUNCTION OF THE
DEVELOPMENT OF IDENTITY

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This is to certify that the

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ABSTRACT

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by Ernest Bruni

This study was an attempt to demonstrate that assumed similarity to the same sex parent varies with both age and sex. More specifically, it was proposed that assumed similarity is affected by identity diffusion and would consequently reflect age and sex trends in the development of identity.

Seven age groups from nine to twenty-one years of age with 30 males and 30 females in each group were administered a form of the semantic differential. Subjects rated themselves and their parents, and a similarity score between self and the same sex parent was derived.

It was expected that first born children would perceive themselves more similar to their parents than would non-first born children in agreement with an earlier study. No consistent pattern was found between first born and non-first born children and the prediction was not confirmed.

Since identity in both males and females is thought to be more diffuse during middle adolescence than at any other time in life, it was predicted that both males and females would see themselves less similar to their same sex parent at this time than would younger or older subjects. Fifteen and 17 year old males do perceive less similarity between themselves and their fathers than do other males, but the prediction was not confirmed for females. The trend may be curved or spiked for males, but appears not to vary consistently for females.

It was predicted that late adolescent females would perceive themselves less similar to their mothers than males see themselves similar to their fathers, although the sex difference was not expected to emerge before late adolescence. This hypothesis is based on the notion that female identity remains more diffuse because it involves more choices and is in general more complex and difficult to achieve in middle class American culture than is male identity. The prediction was not confirmed, but the mean difference scores of 6 of the seven age groups studied tend to support the hypothesis.

The results give some support to the hypothesis that there is an association between perceived similarity to the same sex parent and trends in the development of identity. Implications of assumed similarity trends with regard to age

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and sex differences were discussed and special attention was given to the particular sample as a factor in the interpretation of results. Specific questions that warrant further inquiry were suggested.

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To Dianne

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TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	iii
LIST OF TABLES	v
LIST OF FIGURES	vi
LIST OF APPENDICES	vii
INTRODUCTION	1
Review of the Literature	1
The Problem	11
METHOD	13
Subjects	13
Instrument	15
Procedure	17
RESULTS	19
DISCUSSION	25
Research Implications	30
SUMMARY	33
REFERENCES CITED	35
RELATED BIBLIOGRAPHY	38
APPENDICES	42

LIST OF TABLES

Table		Page
1.	Summary of the analysis of variance of similarity scores with respect to age, sex, and birth order	19
2.	Summary of the analysis of variance of similarity scores across age samples for males	21
3.	Summary of the analysis of variance of similarity scores across age samples for females	21
4.	Summary of the analysis of variance of similarity scores for preadolescents, middle adolescents, and late adolescents for male and female subjects . . .	22
5.	Mean differences of similarity scores between males and females in seven age samples	24

LIST OF FIGURES

Figure		Page
1.	Mean similarity scores for each age group with males and females graphed separately	20
2.	Mean similarity scores for three age samples representing preadolescent, middle adolescent, and late adolescent males and females	23

LIST OF APPENDICES

Appendix	Page
A. Questionnaire used with subjects from fourth grade through high school	42
B. Questionnaire used with college subjects .	45
C. Stimulus concepts and rating scales . . .	48
D. Instructions and semantic differential . .	50

INTRODUCTION

Review of the Literature

Modeling or imitation has long been recognized as an effective mode of learning new behaviors and attitudes. Although modeling is sometimes conceived simply as learning selected segments of behavior, some relationships foster the modeling process by more intense interpersonal involvement at least on the part of the imitating person. He may consciously wish to be like the model and he will tend to perceive himself like the model. Kagan (1964) emphasized the perception of similarity as a motive for modeling when a parent is the model, but Freud implied that it was a more general characteristic. Commenting on identification in this general sense, he wrote that "It (identification) may arise with every new perception of a common quality shared with some other person who is not an object of the sexual instinct" (1922, p. 65). The perception of similarity to a model is a behavioral manifestation of the modeling process.

It is usually conceded that parents are the most significant early models and that modeling after one's parent, particularly the same sex parent, is important in psychological development. Researchers interested in parental

modeling have sometimes focused on perceived similarity in the belief that it reflects a process between the child and his parent which is thought to occur quite early in development--that is, the modeling of the child after his own particular parent.

It has been demonstrated, however, that models change with age. Winker (1949) and Havighurst, Robinson and Dorr (1946) in separate studies asked youngsters whom they would "like to be like." Although the age sequence was not rigid, the general choice moved outward from the family circle. Parents, glamorous adults, attractive and visible young adults and composite imaginary persons were chosen as objects as age increased from childhood to late adolescence. Bronfenbrenner (1958) pointed out that a child may actually be modeling himself after one of these latter figures and the fortuitous result may be increased, or decreased, assumed similarity to his parent.

This progression of models suggests that perceived similarity to the presumed first (parent) model may be overshadowed or perhaps in some other way affected by later modeling. Since models change with age, assumed similarity to the parent may also vary with age.

Most research has not attended to age as a variable. One reason for this is that it has been assumed that later modeling would not negate the perception of similarity to a parent because it is dependent upon and correlated with

parental modeling. That is, parental modeling precedes all other modeling, and the readiness with which a child accepts these non-parental models and incorporates the cultural sex role will be determined by the extent to which he has learned to model himself after his parent. Following this line of reasoning, Kagan (1964) commented that the child, in modeling after a parent, learns also how to "identify," that is, learns how to become similar to a model and what models are appropriate.

But this approach to the integration of early and later modeling in the achievement of identity is oversimplified. The process not only fosters similarity with the model, but the child must recognize differences as well. Seward (1954) observed that this is necessitated partly by age-role discontinuity. She says,

The three-year-old boy cannot identify with his 30 year old father. A more reasonable interpretation would be . . . that in an atmosphere of parental acceptance the little boy can accept his own masculinity, that is, the social sex role of a three year old boy (1954, p. 231).

What is suggested here is that the result of modeling is both a sense of similarity and difference, and that these together lead to a "sense of who one is" in terms of a social role or a sense of individual identity. This sense of identity becomes increasingly important as new models are provided in society because each new model or new aspired role requires a re-definition of the self.

Assumed similarity is directly related to this sense of individual identity. The judgment of similarity--or difference--made by an individual has implicit two separate kinds of judgments; one is how the individual defines or identifies himself and the other refers to his definition of his parent. Whatever social and intrapsychic factors affect individual identity also affect the perception of similarity.

Individual identity is distilled from a variety of social experiences. Modeling, as noted above, is most important. There are other ways that people learn to define themselves; by interacting with others they come to know their distinctive abilities and limitations, i.e., how they are defined by others. The end product is a more or less integrated definition of self shared by an individual and significant others.

We are interested here in variations, particularly age trends in identity formation. In his discussion of ego identity, Erikson (1950, 1959) introduced the concept of identity diffusion as a significant variable in identity development. As with many other concepts denoting developmental events, he found it most useful to characterize it in terms of its pathological forms. Identity diffusion is the lack of clear individual identity; there is confusion and uncertainty in an individual's sense of who he is.

But identity diffusion is not necessarily a pathological characteristic. Indeed, it is essentially an exaggerated form of the identity crisis of normal adolescence.

Dignan (1964) described diffusion as a sense of aimlessness, futility, feeling of boredom and lack of purpose. It is frequently marked by conscious doubts about sex roles and vocational choice.

These feelings in milder form during normal adolescence are the result of both social and intrapsychic factors. On the one hand, the adolescent's sense of identity is disturbed by the experiences of growth changes and the advent of sexual maturity with their attendant cultural demands. Whereas the pre-pubertal child has learned to be relatively comfortable in a period of relative quiescence, the adolescent must adjust to changes within himself. Social reaction to the "gangly" adolescent is not lacking either; he is generally defined as somewhat peculiar--and whatever ails him will pass when he emerges from "this stage." Societal expectations change when a child reaches adolescence; he is expected to become aware of his future role and must begin to make vocational commitments. He is urged with increased insistence to define himself publicly by declaring what he will be. Conversely, the adolescent is also defined in this culture as someone who is nobody yet. Erikson called this a period of moratorium, that is, a period of psycho-social suspension.

The various aspects of identity and their related conflicts are present in every stage of psychological growth from birth to old age, but they are particularly crucial during adolescence. At this stage there are converging psychosocial pressures that demand attention: (1) physical changes; (2) changes in reactions from others; (3) insistence that new responsibilities and future plans be declared, and that, since this is a period of moratorium; (4) decisions and roles are on trial basis only and not to be taken very seriously. Thus it is during adolescence more than at any other period of life that the individual is called upon to integrate a variety of conflicts, roles, model images, abilities, and aspirations into a unitary sense of self.

During this period in normal development, identity is more diffuse than at any other time. We may conclude that judgments about oneself will be more difficult at this time. Inconsistencies within himself and in society must result in a less clear sense of similarity or difference from others, but the cultural consensus would emphasize that the adolescent define himself mostly "different." We expect this feeling to be reflected in assumed similarity measurement.

We may also find that the conflicts of identity resolution may provide significant insight into the differences between sexes with regard to the certainty and clarity of a sense of self. Erikson suggested that the

inability to make a vocational choice is a significant indicator of identity diffusion. Galinsky and Fast (1966) found concurring evidence in case studies. Douvan and Adelson (1966) point out, however, that while boys seem to emphasize vocational choice as an aspect of ego identity, girls do not--at least not as frequently. It is important to note that a sense of identity is derived from the role that is ascribed by society. Who a child is to be will be influenced and in some cases determined by what the environment permits and encourages. Douvan and Adelson observe,

Our culture's expectations for the girl are less simple than for the boy; they are both more ambiguous and less consistent, perhaps because of a recognition of the complexities of feminine development (1966, p. 33).

The result is that,

Girls tend to keep identity diffuse and misty. The boy is made to feel (however much he may doubt it, deep down) that his identity is in his own hands, that the choice of vocation, and with it, of a life style, will define him. The girl cannot count on this degree of active preferment in identity; her identity is bound up not so much in what she is as in what her husband will be (Douvan and Adelson, 1966, p. 18).

The emphasis throughout identity theory is that a person's sense of self, particularly during the crisis phase, is very largely dependent upon the sense of the future. For a girl the future is necessarily hazy, and identity formation must remain so also.

Since a person's identity is derived primarily from interpersonal definitions of himself, it follows that difficulty in identity is the result of inadequacies in social

role definitions. Cultural discontinuities are perhaps the single most important contributing factor to identity diffusion. If role diffusion is significantly related to the judgments in assumed similarity measures, then a systematic factor other than parental modeling will be reflected in the scores.

Assumed similarity research has generally focused on the relationship between similarity and some other tested variable, for example, pathology or anxiety level. There has been no systematic empirical study of variations in similarity related to age or other developmental stage concepts. There are two studies, however, that report incidental data that show trends of similarity between 10 and 14 years of age. Using a technique similar to the adjective checklist, Brodbeck (1954) showed that for both boys and girls, there is no significant change in perceived similarity to the same sex parent. Gray (1959) studied grades 5 through 8 using the semantic differential to measure assumed similarity. She found that there was a very slight tendency for similarity to the same sex parent to increase. The trend of scores reported by these authors was not supported in a study by Bruni (1965). Using the semantic differential, three age groups were compared; 11-12 year olds, 15-16, and 21-22 year olds. Assumed similarity was markedly decreased for the middle group. That is, a curvilinear relationship was suggested with a satisfactory degree of reliability

($p. < .025$) for the male subjects, although the trend was not significant for the females. The disagreement of the latter study with the former two is most likely due to the broader age range sampled.

Although there has been little interest in studying age trends in assumed similarity, this is not the case with sex differences. In general, there is a relatively high consensus that among college student subjects, males tend to see themselves more similar to their fathers than females see themselves like their mothers. Concurring data are reported by Lazowick (1955), Shell et al. (1964), Heilbrun (1965), Bieri et al. (1959), and Dyal (in Osgood et al., 1957). One study only, by Gray and Klaus (1956), showed the opposite pattern of female subjects seeing themselves more similar; the reason for contradiction in this study is not apparent.

Studies utilizing younger subjects, however, do not agree with the consensus of these data. Gray (1959) in the study already cited, observed that preadolescent girls generally see themselves more like their mothers than boys see themselves like their fathers. This trend, however, was not statistically significant. But in a similar study by Carlson (1963), in which she tested sixth graders, similarity (she used a real similarity measure) of girls with mothers was greater than boys with fathers. Carlson suggested that this trend was due to a difference in her

similarity measure. She claimed that the scores denoted specifically "developmental identification"; also, she felt that biases are reflected in other similarity studies that were controlled in her experiment; eg., social desirability and a tendency to be biased by favoring male stereotype concepts.

In the study by Bruni (1965), these age by sex variations were generally supported. Among the younger subjects (11-12 and 15-16 year olds), sex differences in similarity to the same sex parent were not significant, but college males saw themselves more similar than college females. The interpretation offered here is that the difference is not due to a variation in measures as suggested by Carlson (1963), but that the tendency toward greater identity diffusion among females in late adolescence and early adulthood is the significant variable.

Only one study has been reported in which similarity scores have been related directly to ego identity. Dignan (1964) developed an inventory to measure ego identity based on Erikson's conceptualization. Using freshman and sophomore college women, she found that assumed similarity to mother as measured by the semantic differential, was positively related to scores on her ego identity scale. However, in that study, she assumed that the two measures were independent and denoted independent constructs. Her data support the contention we propose here, although we

would interpret the results as due to interdependence of the constructs she measures.

The Problem

If the rationale presented here is accurately descriptive of the processes reflected in assumed similarity, then adolescents, who are experiencing greater identity diffusion, will perceive themselves less like their parent models than either younger or older individuals. In addition to this general expectation for both sexes, after the period of identity crisis, young women will see themselves less like their parent models than will young men, because identity integration is more difficult for them. This difference should not emerge during childhood when identity is not as urgently linked to a clear sense of the future, and it may decrease after early adulthood when female identity may become as stable as male identity. These general hypotheses are to be investigated in the present study.

The data cited above by Bruni (1965) were suggestive that such an age by sex interaction in assumed similarity to the same sex parent does exist. The results were inconclusive, however, because the sample was too small and the age range insufficiently broad. This study is an extension of that research. Two major predictions are investigated.

Hypothesis I: Middle adolescents see themselves less like their same sex parent than do either younger or older subjects. A general curvilinear relationship is predicted for both sexes.

Hypothesis II: From childhood through middle adolescence there is no significant difference between male and female subjects in assumed similarity to the same sex parent; from this period on, however, males see themselves more like their fathers than females see themselves like their mothers.

METHOD

Subjects

The total sample consisted of 420 subjects. There were 7 age-grade groups: 4th, 6th, 8th, 10th, and 12th grade children and two groups of late adolescents, one composed of college freshmen (or lower division students), and the other was composed of college juniors and seniors (upper division students). In each age group there were 60 subjects that consisted of 15 first born males, 15 first born females, 15 non-first born males, and 15 non-first born females.

To determine the appropriate age for the youngest subjects to be included it was necessary to consider two conditions: (1) the youngest subjects must be below adolescent age; and (2) they must be able to use the test instrument as reliably as the older subjects in the study. The youngest children used in previous similarity studies were eleven year olds; these youngsters are perhaps sociologically too close to early adolescence and may already be influenced by the adolescent identity image. Regarding the second condition, Lilly (1966) demonstrated that fourth grade children could comprehend the instructions of the semantic differential and that re-test reliabilities were comparable to those of

adults. Fourth grade children (about nine years old), therefore, appear to be the appropriate group for the youngest age subjects in the range to be studied here.

Clarity of sex role was considered a relevant control variable because it may be different for lower class subjects as compared to middle class subjects, and this may have bearing on assumed similarity scores. An estimate of social class position was determined on the basis of education and employment of father, and only middle class subjects were used in order to emphasize homogeneity in the sample. For the youngest children, information about father was taken from school records; for other subjects, information was supplied in a questionnaire by the subject himself (see Appendices A and B). The criteria outlined by Hollingshead and Redlich (1958) were used for classification, and only class II and III subjects were included.

Palmer (1966) found that first born children see themselves more similar to the same sex parent than do non-first born children. Birth order as a possible confounding variable was controlled in the present study by including an equal number of first born and non-first born subjects in each age-sex category.

Only subjects who had lived with both parents to the time of testing or through high school were used.

Fourth, 6th, 8th, 10th, and 12th grade subjects were tested in their classrooms in a small, predominantly middle class residential community. (Okemos, Michigan, has two

elementary schools, one junior high and one senior high school.) In each grade, classrooms were arbitrarily drawn until a sufficiently large sample was obtained so that each age-sex-birth order category contained the pre-determined number of middle class subjects. Out of the pool of qualified subjects tested at each age level, subjects were drawn at random until each group was completed. The college students were tested at Michigan State University; the freshmen were in an introductory psychology class, and the junior and senior students were tested in two upper division courses in abnormal psychology.

Instrument

Each subject rated himself and his parents as he perceived them on a series of 7-point scales, i.e., a form of the semantic differential. The index of perceived similarity between a subject and his same sex parent is Osgood's D statistic--which is a measure of the similarity between the two sets of ratings or descriptions given by the subject.

The technique was introduced by Osgood et al. (1957) and it is described in detail by Beitner (1961). D is derived in the following manner: The difference between the two ratings on each scale is squared, and the square root of these differences summed over all scales is the raw similarity score.

The D statistic is a very stable measurement. Norman (1959) reported a test-retest coefficient of .97.

Nine concepts were chosen as either relevant to modeling after parents or other persons or roles. Six concepts were included for later analysis and three concepts were used for this study. They were, Me, My Father, and My Mother. The complete list of concepts is given in Appendix C. The only score used in the present study, however, was the similarity between Me and the same sex parent.

Eighteen bipolar scales were chosen from those used in previous studies by Lazowick (1955), Beitner (1961), Osgood et al. (1957), and Mueller (1965). Only those scales were included that appeared to be comprehensible to most fourth graders. Although the D statistic is not dependent upon the scale factors commonly reported in semantic differential research, an equal number of scales was chosen to represent each factor: Evaluation, Potency, and Activity. The list of scales is reported in Appendix C.

Scales were presented in a random order for each concept and the direction of the positive and negative pole of each scale was also left to a random process. The three concepts used in this study (Me, Father, and Mother) were never presented first, so that subjects could become acquainted with the procedure and practice at least one other concept before the test concepts for this study were presented.

The order of presentation was left to a random process with this one exception. A sample test booklet is given in Appendix D.

Procedure

The semantic differential was administered to 27 separate classes. It was introduced as part of a research study on the meaning of certain words, but no further explanation was given other than the comments on the instructions page of the questionnaire itself. For grades 4, 6, and 8, the instructions were given orally in addition to the written instructions in the text booklet (see Appendix D). The students read the instructions while the examiner read or recited identical instructions and copied the illustrations on the blackboard.

Fourth and sixth graders occasionally asked the meaning of some of the scales. They were told first to use the words with whatever meaning made the most sense to them. If a child insisted that he still did not know how to proceed, he was told that the word meant "about the opposite of that word," referring to the other pole of the scale. They were then encouraged to make guesses. This was usually adequate, although a few children were observed using the neutral rating consistently on such difficult scales. Few children expressed such excessive difficulty with the test. Since the majority of youngsters were able to ascribe meaning

to the scales and concepts without hesitation, it is the judgment of the Experimenter that the test was suitable for the fourth grade children.

All of the subjects completed the test in class, with the exception of one of the two classes of college juniors and seniors. In that class, subjects took the tests with them, and returned them completed in the following class period. t-tests for both males and females showed that there was no significant difference between subjects who completed the test in class as contrasted with those who completed the test out of class.

RESULTS

An analysis of variance was done to evaluate the effect of age, sex, and birth order on perceived similarity to the same sex parent. The summary of the analysis is reported in Table 1. It can be seen from the table that the control variable, birth order, was not related to the dependent variable, and it was therefore dropped from further analyses.

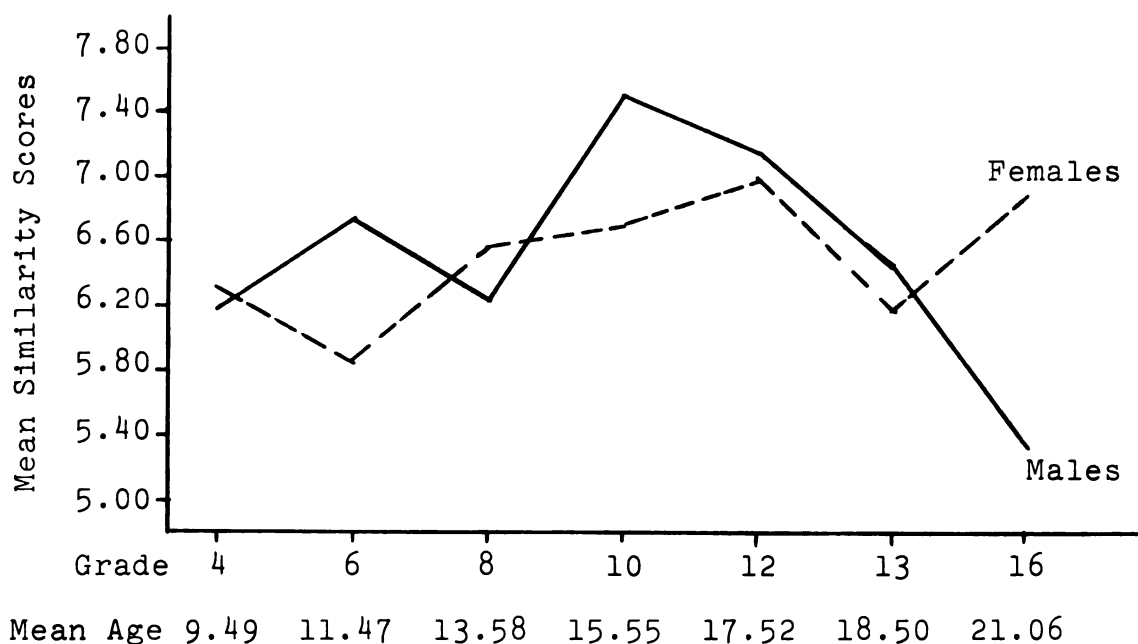
Table 1. Summary of the analysis of variance of similarity scores with respect to age, sex, and birth order.

Source	Sum of Squares	df	Mean Squares	F	P
Age	62.06	6	10.34	2.50	.025
Sex	.02	1	.02		
Birth Order	2.44	1	2.44		
Age x Sex	60.54	6	10.09	2.44	.025
Age x Birth Order	22.12	6	3.69		
Sex x Birth Order	1.14	1	1.14		
Age x Sex x Birth Order	26.39	6	4.40		
Error	1,622.76	392	4.14		
Total	1,797.47	419			

In Hypothesis I, it was predicted that similarity scores would be curvilinear with respect to age, and that the peak of large differences would occur during middle adolescence for both males and females. Mean similarity scores

do vary significantly with age, but interaction between age and sex (see Table 1) indicates that the trend is not identical for both sexes. The data are reported graphically in Figure 1 where it can be seen that the trend is curvilinear for males only.

Figure 1. Mean similarity scores for each age group with males and females graphed separately.



Analysis of variance for males and females separately shows that the age variations for males is significant ($p. < .001$), while that for females is not ($p. < .20$). Summaries of those analyses are reported in Tables 2 and 3. The hypothesis is strongly supported for males, but not for females.

In Hypothesis II it was predicted that there would be no differences between males and females in assumed similarity to the same sex parent from childhood through middle

Table 2. Summary of the analysis of variance of similarity scores across age samples for males.

Source	Sum of Squares	df	Mean Squares	F	P
Age	92.94	6	15.49	3.39	.001
Error	928.65	203	4.57		
Total	1,021.59	209			

Table 3. Summary of the analysis of variance of similarity scores across age samples for females.

Source	Sum of Squares	df	Mean Squares	F	P
Age	29.66	6	4.94	1.35	.20
Error	746.20	203	3.68		
Total	775.86	209			

adolescence, and that from this period on, males see themselves more like their fathers than females see themselves similar to their mothers. With reference to the data, this is a prediction of age by sex interaction such that there would not be significant sex differences in the first five age groups, but that there would be differences in the last two. The hypothesis was tested by an age by sex analysis of variance in which the last two age groups were combined to represent a later adolescent sample, the 10th and 12th grade groups were combined to represent middle adolescents, and the 6th and 8th grade groups together represented

preadolescents. The first group in the total sample, 4th grade, was dropped from the analysis to allow equal sample size in each group. A summary of the analysis is reported below in Table 4.

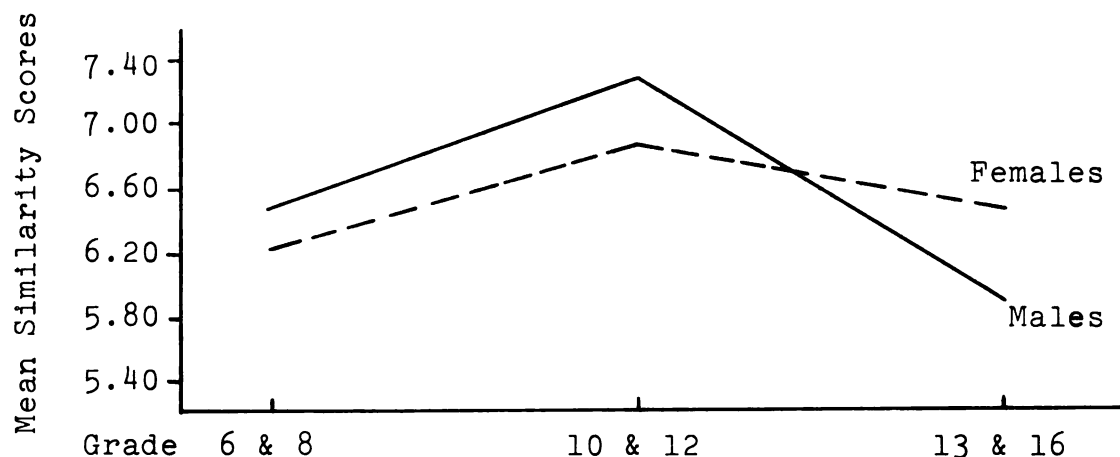
Table 4. Summary of the analysis of variance of similarity scores for preadolescents, middle adolescents, and late adolescents for male and female subjects.

Source	Sum of Squares	df	Mean Squares	F	P
Age	56.79	2	28.40	6.86	.005
Sex	.13	1	.13		
Age x Sex	21.36	2	10.68	2.58	.10
Error	1,464.67	354	4.14		
Total	1,542.96	359			

There is an age by sex interaction, but it is not statistically significant ($p. < .10$). When the data are presented graphically (see Figure 2), however, it is evident that the data approach the trend predicted. In the preadolescent and middle adolescent groups, the mean sex differences are .28 and .47 respectively; these differences are not statistically significant. The difference between males and females in the last group is in the predicted direction (males perceive themselves more similar to the same sex parent than do females), and the difference is reliable (Mean difference = .64; $p. < .05$).

The obtained age by sex interaction is not statistically significant and consequently the hypothesis is not substantiated. The trend in the data, however, warrants a

Figure 2. Mean similarity scores for three age samples representing preadolescent, middle adolescent, and late adolescent males and females.



more detailed analysis in order to isolate the source of the interaction that is present.

In the initial analysis of variance reported above in Table 1, the age by sex interaction was more pronounced than that discussed in the preceding paragraph. Inspection of the data from all seven groups (see Figure 1) suggests that the sex difference in the upper division college student group is the largest, and is the major contributor to the interaction. Tests of significance of sex differences reported in Table 5 support this observation. College junior and senior males perceive themselves significantly more like their fathers than females in the same group see themselves like their mothers ($p. < .005$), whereas there is no significant difference between males and females in any of the other groups. It was predicted that sex differences would not be significant in the first five groups and this prediction was

Table 5. Mean differences of similarity scores between males and females in seven age samples.

Grade		Males	Females	Diff.	t	P
Fourth	Mean	6.21	6.35	.14	.27	.80 ¹
	S.D.	2.12	2.03			
Sixth	Mean	6.77	5.88	.89	1.70	.10 ¹
	S.D.	2.21	1.61			
Eighth	Mean	6.25	6.57	.32	.61	.60 ¹
	S.D.	1.55	1.60			
Tenth	Mean	7.54	6.75	.79	1.50	.20 ¹
	S.D.	2.79	2.45			
Twelfth	Mean	7.15	6.99	.16	.29	.80 ¹
	S.D.	2.14	1.94			
College Freshmen	Mean	6.41	6.15	.26	.50	.35 ²
	S.D.	2.21	1.72			
College Jrs.- Seniors	Mean	5.33	6.88	1.55	2.94	.005 ²
	S.D.	1.73	1.94			

¹Two-tailed tests.²One-tailed tests.

supported. It was further predicted that there would be a difference between sexes in the two college groups, and this difference did emerge in the upper division group. It appears that the college freshmen in particular did not conform to the prediction and this resulted in failure to confirm the hypothesis.

DISCUSSION

A number of factors must be considered in evaluating the failure to replicate Palmer's (1966) finding that first born children perceive themselves more similar to their same sex parent than do non-first born. The small sample size (15 Ss per group) in each age-sex-birth order category may have been insufficient to counter the effect of high between subject variability. Further, Palmer's difference scores were based on test items that were restricted to perceived similarity with regard to attitudes about inhibitory demands of parents and discipline, whereas the instrument used here measured a general factor of perceived affective distance. The subjects in the former study were paid volunteers, but this sample was composed of middle class students who took the test in class as they would do any other assignment. Any or all of these differences may be important variables with regard to the similarity score patterns. First born children may not perceive themselves more similar to their parents in a general sense as Palmer implied, but the trend may be true if perceived similarity is measured in specific content areas or in a specific sub-group sample.

The curvilinearity of the trend of male scores does support the thesis presented here that scores vary as expected on the basis of identity theory. The data show that middle adolescent males see themselves less like their fathers than do either younger or older males. This suggests that the increase in a sense of dissimilarity reflects and coincides with an increase in diffuseness of identity during the same age period. The lack of curvature in the trend of female scores does not contraindicate identity as a factor in similarity scores in women. A more gentle sloping was predicted for females, and the downward trend was expected or occur later than for males--perhaps later than the age range sampled in this study. This prediction is in accord with the notion that identity is more difficult to establish and is stabilized later for females. Twenty-one year old males who are approaching college graduation may indeed have a stronger and more clear sense of the future and of personal identity than females in the same circumstance--particularly unmarried females as were those in the present sample. Females face more choices than males with regard to the focus of identity; for example, junior and senior college women are not as close to resolution of important career decisions as are the males. If a vocational career has been chosen by a college woman, it still remains to be comfortably integrated with other aspects of female identity, particularly marriage and the family role, whereas career decisions are less complex for males.

The data for females do not conform to the hypothesis as stated, but they are not inconsistent with the rationale underlying the hypothesis. The pattern of development of identity in females is different than for males, and this is reflected in the data. But the data do not show whether female identity remains more diffuse indefinitely (as suggested by Douvan and Adelson, 1966) in which case the trend of similarity scores would not be curvilinear regardless of how old the subjects were, or on the other hand, if identity becomes more clear eventually, but later than 21 years of age.

It is interesting that the trend of scores for both males and females approaches the curvilinear quality expected when the data are clustered into three age samples as in Figure 2. The specific choices of age groups and the combinations of sub-samples is very influential on the outcome and interpretation of the data. In this regard also, it appears that the precise nature of the trend is not curvilinear if all seven age groups are considered. For male subjects at least, the trend is spiked. Brodbeck (1954) and Gray (1959) both reported no variations with age from about 10 to 14 and there is no contradictory evidence in the data reported here. But there is a sharp increase in difference scores between ages 13 and 15 and a rather sharp decrease after 17. These observations suggest that the variations in identity that are involved do not change

gradually for males, but are age specific events, and that the changes for females, at least in the range studied here, may be insignificant or too gradual to be consequential.

The hypothesis that there is no difference between males and females in perceived similarity to the same sex parent until later adolescence was not confirmed. There were no significant differences from childhood through high school age, as predicted, but the late adolescents, defined in this study as college age subjects, did not differ consistently as expected. Two groups had been chosen to represent the latter group, lower-division college students (freshmen) and upper-division students (juniors and seniors). The junior and senior men had a smaller mean similarity score than did the women, and this finding is in agreement with the consensus of previous studies with college students (Lazowick 1955, Shell et al., 1964, Heilbrun, 1965, Bieri et al., 1959, and Dyal (in Osgood, Suci, and Tannenbaum, 1957), but the freshmen males and females did not differ. It may be that freshmen who were tested only two months after the start of their first year in college are not yet comparable to the college samples used in previous studies in which the sex difference was obtained. "Middle adolescence" and "late adolescence" are not precisely defined age categories, and the choice of age-grade samples is somewhat arbitrary. The data suggest that freshmen have a more clear sense of identity than do high school seniors, but that later

in college, women return to their earlier more diffuse identity while men continue to solidify theirs. College students do experience many changes during the four years spent in college and this fluctuation in identity diffusion may be one of them. Obviously the data do not allow a conclusive statement about college student identity changes, or sex differences in the changes; they are suggestive only.

The finding that college junior and senior women see themselves less similar to their mothers than males see themselves like their fathers might lead to the speculation that college women are more masculine and aggressive in their orientation and that this accounts for the discrepancy between the sexes at that age. The data reported here do not support such an explanation (although they do not unequivocally refute it). An explanation that seems more parsimonious with regard to the data is that college women have not attained an identity any less diffuse than that of younger females while college males have less diffuse identity than do younger adolescent males. That is, junior and senior college women do not appear to be unique from other females as the hyper-masculine interpretation implies. Even a comparison of college women with non-college but equal age women would not necessarily resolve the question raised here. Non-college women between 18 and 24 years of age may have resolved some of the issues of identity earlier by marrying or starting careers sooner than college women

who usually wait until completion of college. There is a sense in which both males and females who are in a "diffuse identity" state are less masculine and feminine respectively than those who have resolved identity crisis problems. To be consistent with this line of reasoning we might speculate that the data imply that middle adolescent males are less masculine (and therefore more feminine) than other males. It seems more sound theoretically, however, to interpret this as identity diffusion rather than lack of appropriate sex role typing.

Research Implications

The purpose of this study was to demonstrate that perceived similarity to the same sex parent varies with age and sex in accord with differences in identity diffusion between sexes at various ages. Adequate supporting evidence was found for age trends in male subjects only; observed sex differences gave moderate support but were not conclusive. Two foci for continued research may be suggested to clarify unsettled questions. The first is aimed at clarification of sampling problems and sex differences encountered in this study, particularly with regard to females; the second would provide data of a different sort for converging validation of the hypothesis that identity and perceived similarity are related.

First, it remains unclear whether the trend of perceived similarity to mother in females would show the curvilinear quality predicted if an older sample were studied. The question of importance here is whether female identity changes during early adulthood as male identity seems to change between 18 and 21 years of age.

It was noted above that male identity is associated with vocational choice while feminine identity may be more strongly related to marriage and the role of wife. These assumptions imply that perceived similarity may vary not only with age as studied here, but also with these non-age specific role aspirations and achievements. For example, young adult males who have jobs and support themselves presumably have a more clearly established sense of identity than students of the approximate same age. A similar inference could profitably be studied in young adult women who are married as contrasted to similar age unmarried career women, or perhaps women who have combined marriage and career.

The question was raised whether the college freshmen used here are representative of late adolescence. It was suggested that important changes in identity may occur during the college years, which implies that some of the changes may be quite rapid. It would certainly be important for future research in perceived similarity and other aspects of identity to determine if such changes result in reliable variations in test responses between college classes.

Second, a more direct test of the hypothesis that identity and perceived similarity are related could be attempted if a reliable test of identity diffusion were developed. If subjects within a single age-sex category who have clear and "un-diffuse" identity also tend to see themselves more similar to the same sex parent than subjects who are diffuse in identity, then the agreement of different research strategies would greatly enhance the usefulness of the identity hypothesis. Dignan's (1964) study discussed above is a step in this direction, but her identity scale is useful only for freshman and sophomore college women. A replication and expansion of that study is needed.

SUMMARY

This study was an attempt to demonstrate that assumed similarity to the same sex parent varies with both age and sex. More specifically, it was proposed that assumed similarity is affected by identity diffusion and would consequently reflect age and sex trends in the development of identity.

Seven age groups from nine to twenty-one years of age with 30 males and 30 females in each group were administered a form of the semantic differential. Subjects rated themselves and their parents, and a similarity score between self and the same sex parent was derived.

It was expected that first born children would perceive themselves more similar to their parents than would non-first born children in agreement with an earlier study by Palmer (1966). No consistent pattern was found between first born and non-first born children and the prediction was not confirmed.

Since identity in both males and females is thought to be more diffuse during middle adolescence than at any other time in life, it was predicted that both males and females would see themselves less similar to their same sex parent at this time than would younger or older subjects.

Fifteen and 17 year old males do perceive less similarity between themselves and their fathers than do other males, but the prediction was not confirmed for females. The trend may be curved or spiked for males, but appears not to vary consistently for females.

It was predicted that late adolescent females would perceive themselves less similar to their mothers than males see themselves similar to their fathers, although the sex difference was not expected to emerge before late adolescence. This hypothesis is based on the notion that female identity remains more diffuse because it involves more choices and is in general more complex and difficult to achieve in middle class American culture than is male identity. The prediction was not confirmed, but the mean difference scores of 6 of the seven age groups studied tend to support the hypothesis.

The results give some support to the hypothesis that there is an association between perceived similarity to the same sex parent and trends in the development of identity. Implications of assumed similarity trends with regard to age and sex differences were discussed and special attention was given to the particular sample as a factor in the interpretation of results. Specific questions that warrant further inquiry were suggested.

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APPENDIX A

QUESTIONNAIRE USED WITH SUBJECTS FROM
FOURTH GRADE THROUGH HIGH SCHOOL

PLEASE ANSWER THESE QUESTIONS

1. Your name: _____
2. Phone number: _____
3. Sex: _____
4. Age: _____ years _____ months
5. Do you live with both of your parents? (Check one) Yes _____ No _____
6. If you do not live at home, how long have you lived away from your parents? _____
7. Do you have any brothers? Yes _____ No _____
8. Do you have any sisters? Yes _____ No _____
9. If you do have brothers or sisters, are you the oldest? Yes _____ No _____
10. How far did your father go in school?
 - (a) Circle the highest grade he completed:
1 2 3 4 5 6 7 8 9 10 11 12
 - (b) College year completed
1 2 3 4 graduate or professional school
11. What kind of work does (did) your father do? _____
Describe his work briefly: _____

12. Check the one that best describes your father's job:

(a) Manual work with no special training_____

(b) Skilled work that required training_____

(c) Clerk, salesman_____

(d) Owns a small business_____

(e) Farm owner_____

(f) Manager_____

(g) Business executive_____

(h) Teacher_____

(i) Professional_____

APPENDIX B

QUESTIONNAIRE USED WITH COLLEGE SUBJECTS

APPENDIX C

STIMULUS CONCEPTS AND RATING SCALES

APPENDIX C

Stimulus Concepts and Rating Scales

Concepts:

1. Me
2. My mother
3. My father
4. Women
5. Men
6. Females
7. Males
8. My best friend
9. My favorite adult

Rating Scales:

<u>Evaluation</u>	<u>Potency</u>	<u>Activity</u>
1. clean-dirty	1. strong-weak	1. active-passive
2. happy-sad	2. heavy-light	2. fast-slow
3. kind-cruel	3. rugged-delicate	3. hot-cold
4. wise-foolish	4. large-small	4. sharp-dull
5. fair-unfair	5. thin-thick	5. moving-still
6. worthless-valuable	6. humble-proud	6. excitable-calm

APPENDIX D

INSTRUCTIONS AND SEMANTIC DIFFERENTIAL

INSTRUCTIONS

This is a study of the meaning of certain words and the things they stand for. This questionnaire will help us to find out what people think about the words listed inside this booklet. This is not a test and there are no right or wrong answers. We want to know what the words mean to you.

There are 9 pages. At the top of each page there is a word and below it there are 18 scales on which to rate the word. Rate the words on the basis of what they mean to you.

If you were rating the word EXPRESS TRAIN and came to the scale "fast-slow" it would look like this:

EXPRESS TRAIN

1 2 3 4 5 6 7
fast _____ : _____ : _____ : _____ : _____ : _____ slow

You would probably consider an express train quite fast and so you would place an X on the "fast" end of the scale, perhaps like this for extremely fast:

1 2 3 4 5 6 7
fast _____ X : _____ : _____ : _____ : _____ : _____ slow

Or like this for very fast but not extremely fast:

1 2 3 4 5 6 7
fast _____ : X : _____ : _____ : _____ : _____ slow

Be sure to mark between the dots.

If next you were rating the word BICYCLE, you might think it is only fairly fast and you would mark it like this:

1 2 3 4 5 6 7
fast _____ : _____ : X : _____ : _____ : _____ slow

Or if you felt that a BICYCLE is neither fast nor slow, you would mark it like this:

	1	2	3	4	5	6	7	
fast		:	:	:	X	:	:	slow

Or if you ~~felt~~ it is very slow, you would mark it like this:

	1	2	3	4	5	6	7	
fast		:	:	:	:	:	X	slow

Most of the ratings **you** are to make will not be as literal as these examples. For instance, if you ~~were~~ to rate the word AMERICAN on the scale "hot-cold," there is no obvious "correct" answer. Decide what you think the correct rating is and give your first answer. Work as quickly as you can. Be sure to put your marks between the dots, and fill in all scales.

FEMALES

	1	2	3	4	5	6	7	
slow	_____	_____	_____	_____	_____	_____	_____	fast
unfair	_____	_____	_____	_____	_____	_____	_____	fair
valuable	_____	_____	_____	_____	_____	_____	_____	worthless
calm	_____	_____	_____	_____	_____	_____	_____	excitable
happy	_____	_____	_____	_____	_____	_____	_____	sad
proud	_____	_____	_____	_____	_____	_____	_____	humble
hot	_____	_____	_____	_____	_____	_____	_____	cold
thin	_____	_____	_____	_____	_____	_____	_____	thick
cruel	_____	_____	_____	_____	_____	_____	_____	kind
heavy	_____	_____	_____	_____	_____	_____	_____	light
strong	_____	_____	_____	_____	_____	_____	_____	weak
active	_____	_____	_____	_____	_____	_____	_____	passive
still	_____	_____	_____	_____	_____	_____	_____	moving
sharp	_____	_____	_____	_____	_____	_____	_____	dull
clean	_____	_____	_____	_____	_____	_____	_____	dirty
small	_____	_____	_____	_____	_____	_____	_____	large
delicate	_____	_____	_____	_____	_____	_____	_____	rugged
foolish	_____	_____	_____	_____	_____	_____	_____	wise

Go on to the next page.

MEN

	1	2	3	4	5	6	7	
unfair	_____	_____	_____	_____	_____	_____	_____	fair
excitable	_____	_____	_____	_____	_____	_____	_____	calm
cruel	_____	_____	_____	_____	_____	_____	_____	kind
sad	_____	_____	_____	_____	_____	_____	_____	happy
proud	_____	_____	_____	_____	_____	_____	_____	humble
worthless	_____	_____	_____	_____	_____	_____	_____	valuable
dirty	_____	_____	_____	_____	_____	_____	_____	clean
sharp	_____	_____	_____	_____	_____	_____	_____	dull
wise	_____	_____	_____	_____	_____	_____	_____	foolish
thick	_____	_____	_____	_____	_____	_____	_____	thin
strong	_____	_____	_____	_____	_____	_____	_____	weak
small	_____	_____	_____	_____	_____	_____	_____	large
cold	_____	_____	_____	_____	_____	_____	_____	hot
heavy	_____	_____	_____	_____	_____	_____	_____	light
delicate	_____	_____	_____	_____	_____	_____	_____	rugged
fast	_____	_____	_____	_____	_____	_____	_____	slow
passive	_____	_____	_____	_____	_____	_____	_____	active
moving	_____	_____	_____	_____	_____	_____	_____	still

Go on to the next page.

MY MOTHER

	1	2	3	4	5	6	7	
valuable	_____	_____	_____	_____	_____	_____	_____	worthless
calm	_____	_____	_____	_____	_____	_____	_____	excitable
clean	_____	_____	_____	_____	_____	_____	_____	dirty
thin	_____	_____	_____	_____	_____	_____	_____	thick
active	_____	_____	_____	_____	_____	_____	_____	passive
hot	_____	_____	_____	_____	_____	_____	_____	cold
large	_____	_____	_____	_____	_____	_____	_____	small
fast	_____	_____	_____	_____	_____	_____	_____	slow
sad	_____	_____	_____	_____	_____	_____	_____	happy
foolish	_____	_____	_____	_____	_____	_____	_____	wise
light	_____	_____	_____	_____	_____	_____	_____	heavy
moving	_____	_____	_____	_____	_____	_____	_____	still
proud	_____	_____	_____	_____	_____	_____	_____	humble
dull	_____	_____	_____	_____	_____	_____	_____	sharp
kind	_____	_____	_____	_____	_____	_____	_____	cruel
fair	_____	_____	_____	_____	_____	_____	_____	unfair
delicate	_____	_____	_____	_____	_____	_____	_____	rugged
weak	_____	_____	_____	_____	_____	_____	_____	strong

Go on to the next page.

WOMEN

	1	2	3	4	5	6	7	
unfair	_____	_____	_____	_____	_____	_____	_____	fair
small	_____	_____	_____	_____	_____	_____	_____	large
clean	_____	_____	_____	_____	_____	_____	_____	dirty
moving	_____	_____	_____	_____	_____	_____	_____	still
cold	_____	_____	_____	_____	_____	_____	_____	hot
rugged	_____	_____	_____	_____	_____	_____	_____	delicate
fast	_____	_____	_____	_____	_____	_____	_____	slow
thick	_____	_____	_____	_____	_____	_____	_____	thin
kind	_____	_____	_____	_____	_____	_____	_____	cruel
proud	_____	_____	_____	_____	_____	_____	_____	humble
valuable	_____	_____	_____	_____	_____	_____	_____	worthless
active	_____	_____	_____	_____	_____	_____	_____	passive
strong	_____	_____	_____	_____	_____	_____	_____	weak
wise	_____	_____	_____	_____	_____	_____	_____	foolish
dull	_____	_____	_____	_____	_____	_____	_____	sharp
heavy	_____	_____	_____	_____	_____	_____	_____	light
sad	_____	_____	_____	_____	_____	_____	_____	happy
excitable	_____	_____	_____	_____	_____	_____	_____	calm

Go on to the next page.

ME

	1	2	3	4	5	6	7	
fair	_____	_____	_____	_____	_____	_____	_____	unfair
foolish	_____	_____	_____	_____	_____	_____	_____	wise
rugged	_____	_____	_____	_____	_____	_____	_____	delicate
fast	_____	_____	_____	_____	_____	_____	_____	slow
kind	_____	_____	_____	_____	_____	_____	_____	cruel
proud	_____	_____	_____	_____	_____	_____	_____	humble
small	_____	_____	_____	_____	_____	_____	_____	large
passive	_____	_____	_____	_____	_____	_____	_____	active
sharp	_____	_____	_____	_____	_____	_____	_____	dull
happy	_____	_____	_____	_____	_____	_____	_____	sad
valuable	_____	_____	_____	_____	_____	_____	_____	worthless
calm	_____	_____	_____	_____	_____	_____	_____	excitable
hot	_____	_____	_____	_____	_____	_____	_____	cold
moving	_____	_____	_____	_____	_____	_____	_____	still
thin	_____	_____	_____	_____	_____	_____	_____	thick
light	_____	_____	_____	_____	_____	_____	_____	heavy
clean	_____	_____	_____	_____	_____	_____	_____	dirty
weak	_____	_____	_____	_____	_____	_____	_____	strong

Go on to the next page.

MY FATHER

	1	2	3	4	5	6	7	
moving	_____	_____	_____	_____	_____	_____	_____	still
cold	_____	_____	_____	_____	_____	_____	_____	hot
strong	_____	_____	_____	_____	_____	_____	_____	weak
worthless	_____	_____	_____	_____	_____	_____	_____	valuable
excitable	_____	_____	_____	_____	_____	_____	_____	calm
fast	_____	_____	_____	_____	_____	_____	_____	slow
clean	_____	_____	_____	_____	_____	_____	_____	dirty
heavy	_____	_____	_____	_____	_____	_____	_____	light
dull	_____	_____	_____	_____	_____	_____	_____	sharp
cruel	_____	_____	_____	_____	_____	_____	_____	kind
humble	_____	_____	_____	_____	_____	_____	_____	proud
sad	_____	_____	_____	_____	_____	_____	_____	happy
rugged	_____	_____	_____	_____	_____	_____	_____	delicate
foolish	_____	_____	_____	_____	_____	_____	_____	wise
fair	_____	_____	_____	_____	_____	_____	_____	unfair
thin	_____	_____	_____	_____	_____	_____	_____	thick
large	_____	_____	_____	_____	_____	_____	_____	small
active	_____	_____	_____	_____	_____	_____	_____	passive

Go on to the next page.

MALES

	1	2	3	4	5	6	7	
fast	_____	_____	_____	_____	_____	_____	_____	slow
valuable	_____	_____	_____	_____	_____	_____	_____	worthless
large	_____	_____	_____	_____	_____	_____	_____	small
weak	_____	_____	_____	_____	_____	_____	_____	strong
unfair	_____	_____	_____	_____	_____	_____	_____	fair
happy	_____	_____	_____	_____	_____	_____	_____	sad
dull	_____	_____	_____	_____	_____	_____	_____	sharp
clean	_____	_____	_____	_____	_____	_____	_____	dirty
kind	_____	_____	_____	_____	_____	_____	_____	cruel
thick	_____	_____	_____	_____	_____	_____	_____	thin
wise	_____	_____	_____	_____	_____	_____	_____	foolish
proud	_____	_____	_____	_____	_____	_____	_____	humble
rugged	_____	_____	_____	_____	_____	_____	_____	delicate
moving	_____	_____	_____	_____	_____	_____	_____	still
excitable	_____	_____	_____	_____	_____	_____	_____	calm
cold	_____	_____	_____	_____	_____	_____	_____	hot
light	_____	_____	_____	_____	_____	_____	_____	heavy
passive	_____	_____	_____	_____	_____	_____	_____	active

Go on to the next page.

MY BEST FRIEND

	1	2	3	4	5	6	7	
cold	_____	_____	_____	_____	_____	_____	_____	hot
cruel	_____	_____	_____	_____	_____	_____	_____	kind
small	_____	_____	_____	_____	_____	_____	_____	large
delicate	_____	_____	_____	_____	_____	_____	_____	rugged
light	_____	_____	_____	_____	_____	_____	_____	heavy
thick	_____	_____	_____	_____	_____	_____	_____	thin
still	_____	_____	_____	_____	_____	_____	_____	moving
dull	_____	_____	_____	_____	_____	_____	_____	sharp
dirty	_____	_____	_____	_____	_____	_____	_____	clean
excitable	_____	_____	_____	_____	_____	_____	_____	calm
slow	_____	_____	_____	_____	_____	_____	_____	fast
valuable	_____	_____	_____	_____	_____	_____	_____	worthless
happy	_____	_____	_____	_____	_____	_____	_____	sad
active	_____	_____	_____	_____	_____	_____	_____	passive
fair	_____	_____	_____	_____	_____	_____	_____	unfair
weak	_____	_____	_____	_____	_____	_____	_____	strong
foolish	_____	_____	_____	_____	_____	_____	_____	wise
proud	_____	_____	_____	_____	_____	_____	_____	humble

Give the sex of this person: _____

age: _____

Go on to the next page.

MY FAVORITE ADULT (Not a parent)

	1	2	3	4	5	6	7	
hot	_____	_____	_____	_____	_____	_____	_____	cold
small	_____	_____	_____	_____	_____	_____	_____	large
thin	_____	_____	_____	_____	_____	_____	_____	thick
fair	_____	_____	_____	_____	_____	_____	_____	unfair
kind	_____	_____	_____	_____	_____	_____	_____	cruel
worthless	_____	_____	_____	_____	_____	_____	_____	valuable
passive	_____	_____	_____	_____	_____	_____	_____	active
foolish	_____	_____	_____	_____	_____	_____	_____	wise
strong	_____	_____	_____	_____	_____	_____	_____	weak
sharp	_____	_____	_____	_____	_____	_____	_____	dull
clean	_____	_____	_____	_____	_____	_____	_____	dirty
proud	_____	_____	_____	_____	_____	_____	_____	humble
slow	_____	_____	_____	_____	_____	_____	_____	fast
still	_____	_____	_____	_____	_____	_____	_____	moving
sad	_____	_____	_____	_____	_____	_____	_____	happy
delicate	_____	_____	_____	_____	_____	_____	_____	rugged
heavy	_____	_____	_____	_____	_____	_____	_____	light
excitable	_____	_____	_____	_____	_____	_____	_____	calm

Give the sex of this person: _____

age: _____

Go on to the next page.

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